

Memorandum

To Clare Laufenberg Gallardo <Claufenb@energy.state.ca.us>
Company California energy Commission
From Nicolas Puga on behalf of Zemer-Union Fenosa
Date November 19, 2008
Re Comments to RETI Phase 1B Draft Report
cc Nancy Rader, CALWEA

Since 2005, I have studied energy resources development along the California-Baja California border on behalf of the California Energy Commission and currently advise two of the leading wind developers in la Rumorosa, BC area. Based on a review of the Phase 1B Draft Report posted on November 4, 2008 on the RETI website, I found a few points that I would like to comment on, as in my view they may not faithfully reflect the actual conditions in that out-of-state renewable zone.

1. While the overall wind potential reported is consistent with the aggregate capacity of the projects in the CAISO interconnection queue, some privately commissioned assessments carried out by AWS Truewind suggest that several tens of thousands of MW of potential wind power exist in the area. Given the magnitude and quality of the resource and the proximity of the La Rumorosa wind resource to SDG&E's and IID's existing and proposed transmission lines, it would behoove RETI to revisit its estimates for this area (See Asociados Panamericanos supplemental comments dated November 19, 2008). As a minimum, in addition to the capacity already represented in the CAISO queue, the Report should estimate a reasonable amount of "proxy" wind projects; as it was done for other technologies and geographic areas.
2. The average transmission costs reported in table 4-16 are extremely high, and not truly representative of the optimal transmission solutions that a prospective study such as RETI should identify. The \$24/MWh reported as average transmission cost shown in Table 4-16 represents more than \$3.6 billion over 20 years when applied to the 7,633 GWh/yr generated by the Baja California Norte OOS according to table 1.2. Further, the Report supposedly based the reported transmission cost on the cost of interconnection to the Imperial Valley Substation, an interconnection point to the WECC transmission system quite distant from La Rumorosa, but selected by some developers as the most practicable solution under current market and system conditions, given the possibility that the Sunrise Trans Projects will not be completed (or built altogether) on time. However, if one assumes that a least cost transmission solution could be identified and built to bring the Baja wind resource to the California market, the wind projects in la Rumorosa would be much better off interconnecting through a straight line North to the nearest transmission path, such as a new substation along the Southwest Power Link or on the proposed Sunrise Transmission Project (STP) (if built

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along the southern route with the least environmental impact). While only SEMPRA has formally proposed to connect to the SDG&E planned substation in Jacumba, there is no reason why that substation could not be made larger, and for other Baja California wind projects to be connected to that substation through a single or multiple cross-border lines originating in La Rumorosa. This solution could be as much as 80% lower than the cost currently reported in the Phase 1 B report. The attached map (Attachment 1) shows the location of La Rumorosa, Baja California, area where all Baja California OOS resources are located and the approximate location of a transmission corridor to connect this resource to the California transmission system. As can be observed in the Attachment 1, the area immediately SW of the proposed Jacumba substation presents some of the lowest wind potential in the area; thus representing a low opportunity cost if dedicated to easement for a new transmission corridor.

3. The Report states that the Baja California CREZ has not been environmentally ranked due to not having identified sufficient environmental data for the northern Baja California area. I would like to point out that at least two of the major projects proposed in the area (Baja 2000 - 300 MW and Union Fenosa's 1,000 MW) have completed and filed environmental impact reports in compliance with Mexican laws and regulations (Manifestaciones de Impacto Ambiental - MIAs) which in our opinion are quite thorough and functionally comparable to EIR/EIS in California. Our firm carried out a formal comparison of the CEQA and NEPA requirements vis-a-vis the Mexican environmental requirements, and found them to be functionally equivalent. Perhaps the most salient difference would be that compliance with historical/archeological impact assessment requirements is monitored by the Instituto Nacional de Arqueología e Historia (INAH) a Mexican federal agency separate from the SEMARNAT (the Mexican EPA). Additionally, SEMARNAT is expected to adopt a wind farm environmental development standard which will require avian and bat interaction monitoring and mitigation practices patterned after the best US practices.
4. The topographic and climatologic characteristics of both sides of the California-Baja California border are quite similar. Similar flora and fauna habitats are found on both sides of the border and animal populations cross freely back and forth across it. These similarities can be easily observed in satellite/aerial photography, such as that pictured in Attachment 2 which shows the continuity of the terrain. Having observed this environmental symmetry, it would be reasonable to assume that, barring unmitigable impact on the habitats of threatened or endangered species, such as the Quino Checkered Butterfly or the Peninsula Big Horn Sheep, the Baja California CREZ could be awarded a relative environmental concern ranking similar to that awarded by RETI to the San Diego South CREZ.



